

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A sputtering target, comprising a copper alloy sputtering target containing 0.01 to less than 0.5wt% of at least one element selected from Al and Sn, and ~~containing~~ at least one of Mn or Si or both in a total amount of 0.03wtppm to 0.25wtppm or less, and at least one element selected from the group consisting of Sb, Zr, Ti, Cr, Ag, Au, Cd, In and As in a total amount of 1.0wtppm or less.

Claims 2-15 (canceled).

Claim 16 (previously presented): A sputtering target according to claim 1, wherein said copper alloy sputtering target contains 0.05 to 0.2wt% of said at least one element selected from Al and Sn.

Claim 17 (currently amended): A sputtering target according to claim 16, wherein said ~~copper alloy sputtering target contains~~ total amount of said at least one element selected from the group consisting of Sb, Zr, Ti, Cr, Ag, Au, Cd, In and As ~~in a total amount of is~~ 0.3wtppm or less.

Claim 18 (previously presented): A sputtering target according to claim 17, wherein inevitable impurities, excluding gas components, in said copper alloy sputtering target are 1wtppm or less.

Claim 19 (currently amended): A sputtering target according to claim 1, wherein said ~~copper alloy sputtering target contains~~ total amount of said at least one element selected from the group consisting of Sb, Zr, Ti, Cr, Ag, Au, Cd, In and As ~~in a total amount of~~ is 0.13wtppm to 1.0wtppm or less.

Claim 20 (currently amended): A sputtering target according to claim 19, wherein said total amount of said at least one element selected from the group consisting of Sb, Zr, Ti, Cr, Ag, Au, Cd, In and As is does not exceed 0.5wtppm or less.

Claim 21 (currently amended): A sputtering target according to claim 20, wherein said total amount of said at least one element selected from the group consisting of Sb, Zr, Ti, Cr, Ag, Au, Cd, In and As is does not exceed 0.3wtppm or less.

Claim 22 (previously presented): A sputtering target according to claim 1, wherein inevitable impurities, excluding gas components, in said copper alloy sputtering target are 10wtppm or less.

Claim 23 (previously presented): A sputtering target according to claim 22, wherein said inevitable impurities, excluding gas components, are 1wtppm or less.

Claim 24 (previously presented): A sputtering target according to claim 1, wherein said copper alloy sputtering target contains 0.05wtppm or less of Na and K, respectively; wherein said copper alloy sputtering target contains 1 wtppb or less of U and Th, respectively; and wherein said copper alloy sputtering target contains 5wtppm or less of oxygen, 2wtppm or less of nitrogen, and 2wtppm or less of carbon.

Claim 25 (previously presented): A sputtering target according to claim 1, wherein said copper alloy sputtering target contains 0.02wtppm or less of Na and K, respectively; wherein said copper alloy sputtering target contains 0.5wtppb or less of U and Th, respectively; and wherein said copper alloy sputtering target contains 1wtppm or less of oxygen, 1wtppm or less of nitrogen, and 1wtppm or less of carbon.

Claim 26 (previously presented): A sputtering target according to claim 1, wherein said copper alloy sputtering target has an average crystal grain size of 100 μ m or less and an average grain size variation within $\pm 20\%$.

Claims 27-34 (canceled).

Claim 35 (new): A copper alloy sputtering target for forming a thin film seed layer for semiconductor wiring, consisting of:

0.01 to less than 0.5wt% of at least one element selected from Al and Sn for
preventing coagulation upon plating on the seed layer;

at least one of Mn or Si or both in a total amount of 0.03wtppm to 0.25wtppm for improving oxidation resistance;

at least one element selected from the group consisting of Sb, Zr, Ti, Cr, Ag, Au, Cd, In and As in a total amount of 0.13wtppm to 1.0wtppm for improving oxidation resistance; and

a remainder being copper.

Claim 36 (new): A copper alloy sputtering target according to claim 35 wherein said at least one of Mn or Si or both is Mn.

Claim 37 (new): A copper alloy sputtering target according to claim 35, wherein said copper alloy sputtering target contains 0.05 to 0.2wt% of said at least one element selected from Al and Sn, and wherein said total amount of said at least one element selected from the group consisting of Sb, Zr, Ti, Cr, Ag, Au, Cd, In and As is 0.13wtppm to 0.3wtppm.

Claim 38 (new): A copper alloy sputtering target according to claim 35, wherein said copper alloy sputtering target has an average crystal grain size of 100 μ m or less and an average grain size variation within \pm 20%.

Claim 39 (new): A copper alloy sputtering target for forming a thin film seed layer for semiconductor wiring, consisting of:

0.01 to less than 0.5wt% of Sn for preventing coagulation upon plating on the seed layer;

at least one of Mn or Si or both in a total amount of 0.03wtppm to 0.25wtppm for improving oxidation resistance;

at least one element selected from the group consisting of Sb, Zr, Ti, Cr, Ag, Au, Cd, In and As in a total amount of 0.13wtppm to 1.0wtppm for improving oxidation resistance; and

a remainder being copper.

Claim 40 (new): A copper alloy sputtering target according to claim 39 wherein said at least one of Mn or Si or both is Mn.

Claim 41 (new): A copper alloy sputtering target according to claim 39, wherein said copper alloy sputtering target contains 0.05 to 0.2wt% of said Sn, and wherein said total amount of said at least one element selected from the group consisting of Sb, Zr, Ti, Cr, Ag, Au, Cd, In and As is 0.13wtppm to 0.3wtppm.

Claim 42 (new): A copper alloy sputtering target according to claim 39, wherein said copper alloy sputtering target has an average crystal grain size of 100 μ m or less and an average grain size variation within $\pm 20\%$.